Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Yelahanka Division

Comprehensive Development of Roads and Drains at Maruthinagara, Kamakshamma layout, Kondappa layout and A sector in ward no 01, 02 & 04 of Yelahanka division (Package No. 01)

1	Compheresive Development of balance roads and drains at A sector in Ward no-04 Yelahanka New Town Sub Division
2	Compheresive Development of Maruthinagara Alfa School road and surrounding areas in Kempegowda Ward no-01
3	Compheresive Development of Eastern side of Kondappa layout and surrounding areas in Chowdeshwari Ward no-02
4	Compheresive Development of Western side of kamakshamma layout and surrounding areas in Chowdeshwari Ward no-02
5	Compheresive Development of Western side of Kondappa layout and surrounding areas in Chowdeshwari Ward no-02

Quantity Abstract (Estimate Wise)

Sl No	Description of Item	Unit	Compheresive Development of balance roads and drains at A sector in Ward no-04 Yelahanka New Town	Compheresive Development of Maruthinagara Alfa School road and surrounding	Compheresive Development of Eastern side of Kondappa layout and surrounding areas in Chowdeshwari Ward no-02	Compheresive Development of Western side of kamakshamma layout and surrounding areas in Chowdeshwari Ward no-02	Compheresive Development of Western side of Kondappa layout and surrounding areas in Chowdeshwari Ward no-02	Total Quantity as per Estimation	Rate, Rs	Amount, Rs
			1	2	3	4	5			
1	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications	Cum	3758.96	1508.14	1599.86	1552.14	1426.01	9845.12	215.28	2119457.22
2	Filling in foundation with granite/trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications. Data Rate a) 40mm Jelly	Cum	2.60	0.99	0.99	0.99	0.99	6.57	1901.00	12493.17
3	b) 20mm Jelly	Cum	2.60	0.99	0.99	0.99	0.99	6.57	1901.00	12493.17
4	c) Coarse sand.	Cum	1.95	0.74	0.74	0.74	0.74	4.93	2651.00	13066.78
5	d) Fine Sand	Cum	1.30	0.50	0.50	0.50	0.50	3.29	2651.00	8711.19
6	e) 12.5mm chips	Cum	1.95	0.74	0.74	0.74	0.74	4.93	1901.00	9370.03
7	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984- 995 with latest amendments and conveyingto work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bends, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. for : HDPE Grade PE80-PN6.0, 630 mm dia	Rmt	37.80	14.40	14.40	14.40	14.40	95.40	10822.32	1032449.33

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8	Providing of Geonets for Rain Water Harvesting pit on top of the filter media as specified indrawings or as approved by Engineer Incharge.	Sqm	6.51	2.48	2.48	2.48	2.48	16.43	71.03	1167.02
9	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications.	Cum	649.91	214.26	247.70	17.75	268.76	1398.37	5421.90	7581808.75
10	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification.	Cum	1128.43	452.99	512.86	508.59	483.58	3086.45	7070.20	21821787.68
11	KSRRB M2200-8. Providing weep holes in Brick masonry / Plain / Reinforced concrete abutment, wing wall / return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing force. Complete as per drawing and Technical Specifications including cost of materials, labour, HOM complete as per specifications.	Nos	0.00	220.00	0.00	0.00	0.00	220.00	155.82	34280.40
12	KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.	Tn	68.34	25.21	32.93	31.60	29.64	187.71	73992.24	13889142.86
13	Providing and Fixing pre cast covering Slab 100mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge.	Sqm	1591.95	2405.28	838.91	566.40	740.76	6143.30	2337.00	14356897.94

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14	Providing and fixing RCC precast cover slab of 250mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge.	Sqm	48.96	70.20	167.04	84.00	48.72	418.92	5418.00	2269708.56
15	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete.	Nos	7540.00	716.00	462.00	222.00	0.00	8940.00	432.48	3866371.20
16	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications.	Sqm	1017.90	128.80	182.00	35.00	0.00	1363.70	84.80	115641.76
17	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. Loading and unloading	Cum			203.40	464.64	274.02	942.06	973.42	917020.05
18	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications	Cum		1678.05	0.00	124.02	0.00	1802.07	63.94	115224.36
19	KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of modified proctors density.	Cum		307.80	0.00	0.00	0.00	307.80	344.50	106037.10
20	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications.	Cum		153.90	0.00	0.00	0.00	153.90	1994.92	307018.19

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21	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications.	Cum		235.98	0.00	0.00	0.00	235.98	2001.28	472262.05
22	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications.	Sqm		1026.00	0.00	0.00	0.00	1026.00	29.68	30451.68
23	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per	Sqm		1026.00	0.00	0.00	0.00	1026.00	12.72	13050.72
24	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen	Cum		51.30	0.00	0.00	0.00	51.30	6407.70	328715.01
25	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)	Cum		41.04	0.00	0.00	0.00	41.04	7537.66	309345.57

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26	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications.	Sqm		42.75	0.00	0.00	0.00	42.75	454.74	19440.14
27	KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5. with OPC at 150 kg/cum and coarse aggregate .86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with Slip form paver with electronic sensor.	Cum		685.13	152.55	410.49	241.01	1489.17	3800.10	5658994.92
28	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound.	Cum		685.13	152.55	410.49	354.83	1602.99	5210.96	8353116.77

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	Technical Sanction Accorded For Rs.10cr. wbeekendy Head of A/C..P.3075..... CER NO :...5A..... Dt:07/8/2020 CE (YN)								Construction Cost	83775524.00
									12% GST	10053062.88
									Tender Premium 5%	4188776.20
									DPR and PMC Cost Including GST	1980000.00
									Sub Total	99997363.08
									Miscellaneous	2636.92
									Grand Total	100000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019 and Data Rates.

Assistant Engineer

Asst. Executive Engineer

Executive Engineer

Administrative Sanction for Rs. ...1000.00 lakhs ..... Ten crores only .....

is accorded under head P.3075 2020-21 Special Comprehensive Development works

Registered as CE No. ..... Subject to conditions contained in enclosed memo No. EE/YHK/AS/45/2020-21 ..... Dt. 17.11.2020

Executive Engineer